Amendments to the Specification:

Please replace the paragraph beginning on page 2, line 26 and continuing to page 3, line 13 with the following amended paragraph:

"Currently, opto-electronic modules are designed such that conventional optical and electrical components fit within standard form factors. For instance, many configurations for optical and electrical components are suited for use of TO can[['d]]optical components. Many optical components are connected to the electrical components through wires that transmit conventional singled ended electrical signals. Single ended signals are commonly used in interfaces and buses within computing systems due to its simplicity and ease of implementation. Single ended signals are transmitted by using a positive voltage as a "one" and a zero voltage (ground) as a "zero." Unfortunately, problems within a bus or an port can arise due to bouncing signals, interference, degradation over distance and cross-talk from adjacent signals. These problems become more severe as the speed of a system increases, the longer a transmission distance becomes (e.g., when the length of a cable increases). As a result, the length of the wires that connect the optical devices and the electrical devices are very limited. The short wires provide little room for adjusting the position of the optical device with respect to the electrical device such that the optical and electrical ports are positioned within a required positional window. This is increasingly problematic as the transmission speeds of opto-electronic modules increase since the length of the wires further shorten. The limitations created by the wire length thereby cause opto-electronic systems to be quite inflexible to accommodating optical and electrical devices of various types and shapes (e.g., [[,]] alternative lower cost, higher reliability, and higher data rate components). Such inflexibility also limits the types of materials that can be used within an opto-electronic module."

Please replace the paragraph beginning on page 10, line 20 and continuing to page 11, line 8 with the following amended paragraph:

"OE device 210 as shown in FIG. 4 includes a semiconductor chip package 220, a support block 222, and a barrel unit 224. It is not shown in FIGS. 4 or 5, but at least one photonic device is attached to support block 222. See FIG. 6 for one embodiment of an OE device 300 wherein the photonic devices 302 are shown. Semiconductor chip package 220 is any type of package having a semiconductor chip that is at least partially encapsulated within a protective material, such as epoxy or resin. Chip package 200 should have electrical traces

and/or contacts that allow for electrical connection with support block 222. In one embodiment, a semiconductor die within the chip package will have uplinking electrical contacts formed directly on the top surface of the die. These uplinking contacts are exposed through the top surface of the chip package 220 and thereby can be connected to contact pads of support block 222. Traces on the surface or within support block 222 serve to connect chip package 220 to the photonic devices attached to support block 222. In FIGS. 4 and 5, the ~~photnic~~ **photonic** devices are attached to the front face of support block 222, which is the face to which barrel unit 224 is attached. The hollow barrels 226 provide access for an optical connection to a transmission medium. Barrels 226 also serve as the optical port 216 to which optical transmission mediums can be plugged into. As shown in FIG. 5, ferrule 228 is aligned in the optical plane 230 so that optical fiber 232 can be connected to optical port 216. Barrel unit 224 can have various shapes and sizes. For instance, barrel unit 224 can have a large number of barrels wherein each barrel provides access to one or more photonic devices. These barrels 226 can also have various shapes to accommodate varying numbers of fibers and different shaped ferrules. All of the components 220, 222, and 226 can have various shapes and sizes to accommodate various standards and requirements."

Please replace the paragraph beginning on page 14, line 30 and continuing to page 15, line 3 with the following amended paragraph:

"Again, various types of OE devices can be utilized with the present invention since a flex connector that attaches a first and second substrate allows for positional adjustment between the substrates and therefore the optical and electrical planes. For example, conventional TO can'd optical devices can be attached to the OE support substrate, while a flex connector allows an electrical interface substrate to be moved with respect to the OE support substrate. Other photonic devices can be of various types ranging from LEDs, ~~VCSLES~~ **VCSEL's**, PINs, edge-emitting lasers, etc."

Please replace the paragraph located on page 15, lines 16 to 25, with the following amended paragraph:

"FIG. 7 illustrates a side view of two OE units 702 are utilized to form an internal line card to line card connection. OE units 702 provide for optical communication between two

adjacent line cards 706 and 708. Line cards 706 and 708 are connected to a back plane 720. OE ~~devhices~~ **devices** 710 located on the end of line cards 706 and 708 are connected to optical fibers 712. OE systems 702 each include a first substrate 714 that support an optical device 716, a flex connector 718, and a second substrate 722 which is connected to one of the line cards 706 or 708. The first and second substrates 714 and 722 are stacked on top of each other and can be directly or indirectly attached to each other. Advantage is that this configuration can create an optical link (board to board) deep within a line card, thereby not crowding the line card port side."